

横断山区莎草科新分类群 (一)

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NEW TAXA OF THE CYPERACEAE FROM HENGDUANSHAN (1)

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关键词 莎草科; 荸荠属; 珍珠茅属; 嵩草属; 新分类群

Key words Cyperaceae; *Eleocharis*; *Scleria*; *Kobresia*; New taxa

作者于1981—1983年随中国科学院青藏综合科学考察队赴横断山区考察, 采集到不少莎草科植物标本。近年来, 在承担《横断山区植物》一书莎草科的编著任务中, 除鉴定了青藏队采集的该科标本外, 还鉴定了我所标本馆收藏的该科部分标本, 发现了一些新分类群, 现在本文发表¹⁾。

荸荠属 *Eleocharis* R. Br.

短刚针蔺 新种 图 1

Eleocharis setulosa P. C. Li, sp. nov.

(Sect. *Eleocharis*)

Affinis *E. pellucidae* Preal., quae setis hypogynceis 6, nucula longiore, spicula multiflora differt.

Rhizoma caespitosum. Culmus pergracilis filiformis 7—11 cm altus, leavis. Folia abscentia; vaginae 2, basiales membranaceae, inferior rubro-brunnea superior luteo-albescens ore obliquae, apice acuminatae, 8—18 mm longae. Spicula ovata vel ovato-lanceolata, 3—4 mm longa, 4—6-flora; squamae ima sterilis oblonga, apice obtusa 1/2 circumit, vel ultra amplectens, caeterae floriferae, oblongae 1.9—2.1 mm longae, membranaceae, rubro-brunneae, dorso stramineae, apice obtusae margine

1988-07-19收稿

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1) 本文单位代号E, PE及未注明单位代号的标本均藏我所标本馆。

albo-hyalinae uninerviae. Setae hypogynae 2—5, nuculae 1—2 plo breviores, retroscabrae. Nux oblonga obtusiangulo-trigona, 1.5 mm longa, stramineo-viridis, apice constricta; cellulae extimae irregulariter et longitudinaliter oblongae. Stylopodium deltoideum, a basi lata sursum ad apicem attenuatum, stramineum, latitudine 1/2 nucem aequans. Stigmata 3.

Yunnan (云南): Zhongdian (中甸), Xiaozhongdian (小中甸), alt. 3170 m, in pratis alpini, 8 Aug. 1981, Tian Xiao-wen (田效文), Tang Zhong-xiao (汤宗孝) et Zhang Zheng-hua (张振华) 830 (Holotypus PE); Ninglang (宁蒗), alt. 3180 m, in pratis in convallibus fluminis, 7 Sept. 1981, Group. Veget. Exped. Qinghai-Xizang. (青藏队植被组) 94(2).

本种与透明鳞针蔺 *E. pellucida* Preal. 接近, 但后者下位刚毛 6 条, 长于小坚果, 小穗具多数花可与本种区别。

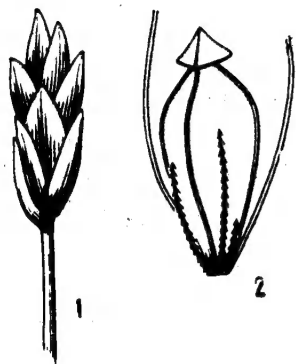


图1 短刚针蔺 *Eleocharis setulosa* P. C. Li

1. 小穗; 2. 小坚果。(吴彰桦绘)

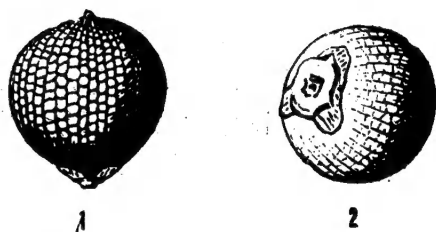


图2 独龙珍珠茅 *Scleria dulungensis* P. C. Li

1. 小坚果侧面观; 2. 小坚果下面观, 示下位盘。(吴彰桦绘)

珍珠茅属 *Scleria* Berg.

独龙珍珠茅 新种 图2

Scleria dulungensis P. C. Li, sp. nov.

(Sect. *Scleria*)

Affinis *S. purpurascens* Steud., quae foliis subtus et vaginis pubescentibus, spiculis 2—3 fasciculatis, nucibus albo-cancellatis, lobulis discorum triangulatis differt.

Rhizoma ignotum. Culmus robustus ad 100 cm altus, 5—8 mm crassus, triquetrus, ad angulos scaberulus. Folia caulina 15—20 mm lata, glabra ad margine nervosque scabra; vaginac triquetrae exalatae glabrae virellae, ligulae oblongae ciliatae. Inflorescentia ad 50 cm longa; paniculae patiales 9—11, patulae remotae, 10—15 cm longae, 10—12 cm latae, multi-spiculatae; pedunculi 16—23 cm longi laeves;

rhachilla hispidula, bracteae foliaceae virello-vaginatae, bracteolae squamiformes, longi-aristatae, evaginatae. Spiculae unisexuales, solitariae, atro-purpureae, superiores ♂, oblongae, c. 3.5 mm longae, apice truncatae, basilaris ♀, obovata 3.5—4 mm longa. Squamae ♀ ovato-oblongae 3—3.5 mm longae, acuminatae ad carinam virides. Nux globosa, c. 3 mm longa, apice apiculata, alba cyaneo-cancellata, superne leviter pubescens, discus c. 2 mm diam., 3-lobuatus, lobulis semiorbicularibus aureis purpureo-striatis, margine reflexis.

Yunnan (云南): Gongshan Xian (贡山县), Dulungjiang (独龙江), Maku (马库), alt. 1300—1400 m, ad marginem sylvarum sempervirentium latifoliarum, 9 Aug. 1982, Exped. Qinghai-Xizang. (青藏队) 9195 (Holotypus PE).

本种与 *S. purpurascens* Steud. 接近, 但后者叶下面和叶鞘被毛, 小穗 2—3 枚簇生, 小坚果具白色的格纹, 下位盘裂片三角形可与本种区别。

嵩草属 *Kobresia* Willd.

黑麦嵩草 新种 图 3

Kobresia loliaceae Wang et Tang, sp. nov. in herb.

(Sect. *Kobresia*)

Affinis *K. fragili* Clarke, quae foliis linearibus, prophyllis brevioribus (3—3.5 mm longis), reductis tepalis 1—4 differt.

Rhizoma caespitosum. Culmus 15—40 cm altus, foliatus, gracilis laevis, ad basin vaginis pallide brunneis obtectus. Folia culmo breviora, plana 1.5—2 mm lata. Inflorescentia in circuitu cylindrica, 2.5—6 cm longa, 4—5 mm lata, subdensa, spiculae propriae 3—6, oblongae 7—15 mm longae, pauciflorae, subsessiles, superiores approximatae, inferiores 2 paullum remotae. Bracteae superiores squamiformes longe aristatae, inferiores foliaceae inflorescentiam superantes, evaginant. Spiculae partiales laterales 1—4, androgynae, flos basilaris ♀, flores superiores 1—4 ♂. Squamae oblongae, 5—5.5 mm longae, albae pallidae membranaceae dorso virides trinervae, apice acuminatae mucronatae. Prophyllum oblongum, 5—6 mm longum margine fere ad apicem usque connatum, viridulum multinervosum bicarinatum glabrum, apice in rostrum sublongum conicum ore hyalinum bidentulum sensim attenuatum. Nux obovato-oblonga, trigona pallide brunnea, 3 mm longa. Styli basis incrassata. Stigmata 3.

Sichuan (四川): Yanyuan (盐源), Yuanbao (元宝), Daling (大林), alt. 3200 m, in pratis subalpinis in saxis calcareis, 20 Jul. 1983, Exped. Qinghai-Xizang. (青藏队) 12065 (Holotypus PE); Yunnan (云南): sine loco exacto, 7 Jul. 1938, sine nomine collectoris 10766.

本种与囊状嵩草 *K. fragilis* Clarke 接近, 但后者叶线形, 先出叶短 (3—3.5 mm

长), 有1—4枚退化花被片, 可与本种区别。

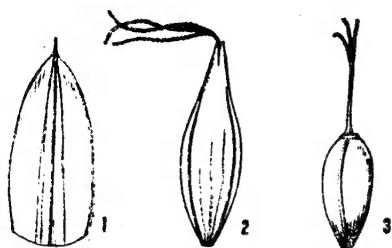


图3 黑麦嵩草 *Kobresia loliaceae* Wang et Tang

1. 鳞片; 2. 先出叶; 3. 小坚果。(吴影桦绘)

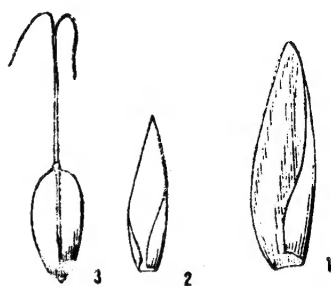


图4 湖滨嵩草 *Kobresia lacustris* P. C. Li

1. 鳞片; 2. 先出叶; 小坚果。(吴影桦绘)

湖滨嵩草 新种 图4

Kobresia lacustris P. C. Li, sp. nov.

(Sect. *Elyna*)

Affinis *K. pamiroalaicae* Ivan., quae prophyllis apice truncatis vel rotundis, costatis 1—2-nerviis, nucibus demum stramineo-viridibus, stigmatibus 3 differt.

Rhizoma caespitosum Culmus 30—40 cm altus 2—3 mm crassus teres validus laevis ad basin vaginis vetustis brunneis nitantibus alte obtectus. Folia culmo breviora canaliculata 1—2 mm lata. Spicula oblongo-cylindrica ca. 3 cm longa 5 mm lata, multi-et densiflora, spiculae partiales numerosas, terminales 2—3 ♂ laterales androgynae, flos basilaris ♀, flores superiores 2—3 ♂. Squamae ♀ oblongae 5—6 mm longae, chartaceae fuscae dorso virides, costatae, apice obtusae. Prophyllum ovato-lanceolatum ca. 4 mm longum membranaceum marginibus basi connatum apice acuminatae ecottatum et enervium. Nux oblonga 3 mm longa compresso-trigona et biconvexa demum atrofusca nitentia breviter rostrata. Styli basis subaequalis. Stigmata 2—3.

Sichuan (四川): Daocheng (稻城), Sangdoi (桑堆), Paquo (帕措), alt. 4450 m, ad marginem lacuum in pratis alpini, 22 Aug. 1981, Exped. Qinghai-Xizang. (青藏队) 5112 (Holotypus PE).

本种与帕米尔嵩草 *K. pamiroalaica* Ivan. 接近, 但后者先出叶顶端截形或圆, 具脊和1—2脉, 小坚果成熟后黄绿色, 柱头3枚可与本种区别。

松林嵩草 新种 图5

Kobresia pinetorum Wang et Tang, sp. nov. in herb.

(Sect. *Elyna*)

Affinis *K. capillifoliae* (Decne.) Clarke, quae spiculis lineari-cylindricis, multi-et densifloris, squamis ♀ castaneis differt.

Rhizoma caespitosum. Culmus pergracilis, 18—25 cm altus mollis. Spicula oblonga, 8—10 mm longa, 2—3 mm lata, pauciflora, spiculae partiales 10—12,

androgynae ellipticae 4.5—5 mm longae, flos basilaris ♀, flores superiores 2—4 ♂. Squamae ♀ ovato-lanceolatae, 3.5—4.5 mm longae, membranaceae, pallide ferrugineae, dorso costatae, apice acuminatae, inferiores mucronatae. Prophyllum ellipticum, 3.5—4 mm longum, membranaceum pallide ferrugineum marginibus basi connatum, dorso 1—2-nervium, apice emarginatum. Nux obovato-oblonga vel oblonga, 2.3—2.8 mm longa, trigona pallide brunnea erostrata. Styli basis subincrassata. Stigmata 3.

Yunnan (云南): Yongsheng (永胜), versus meridiem a Boluo (波罗), alt. 2600 m, in pinetis, Jiang Shu (姜怒) 6199 (Holotypus PE); Lijiang (丽江), Fengho (奉科) ad Baiqiaoping (百草坪) alt. 2600 m, in pinetis, 5 Oct. 1983, Exped. Qinghai-Xizang. (青藏队) 14944.

本种与线叶嵩草 *K. capillifolia* (Decne.) Clarke 接近, 惟后者小穗线状圆柱形, 具多数密生的花, 雌花鳞片栗色可与本种区别。

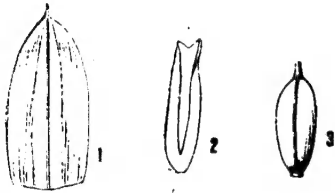


图5 松林嵩草 *Kobresia pinetorum* Wang et Tang
1. 鳞片; 2. 先出叶; 3. 小坚果。(吴彩桦绘)

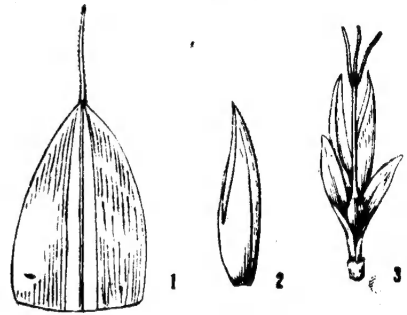


图6 鳞被嵩草 *Kobresia lepidochlamys* Wang et Tang
1. 鳞片; 2. 先出叶; 3. 除去先出叶的支小穗, 示雌花两侧的两枚膜质花被片及其上部的雄花。(吴彩桦绘)

鳞被嵩草 新种 图6

Kobresia lepidochlamys Wang et Tang, sp. nov. in herb.

(Sect. *Elyna*)

Affinis *K. cuneatae* Kükenth., quae foliis latioribus, floribus ♀ tepalis squamiformibus carentibus, squamis apice truncatis vel emarginatis, prophyllis margine ad basin connatis differt.

Rhizoma caespitosum. Culmus ad 60 cm altus, 3 mm crassus, subrigidus, basi vaginis aphyllis brunneis nitantibus obtectus. Folia culmo breviora linearia canaliculato-plana, 2—3 mm lata, margine scaberula. Spicula clavato-cylindrica, 4.5 cm longa, 8—9 mm lata, multi-et densiflora, inferne laxior, spiculae partiales numerosae, terminalis ♂, laterales androgynae, oblongae, 7 mm longae, flos basilaris ♀, ad basin 2 tepalis squamiformibus membranaceis, flores superiores 2—3 ♂. Squamae pallide brunneae ovato-lanceolatae, 5—5.5 mm longae, 3.5 mm latae, margine late albo-hyalinae, dorso costatae, apice acuminatae, in aristam

parce-scabram productae. Prophyllum ovato-lanceolatum, 7 mm longum pallide brunneum, chartaceum, margine ad medium connatum glabrum, dorso ad carinam scaberulum, 2—3-nerviis, apice albo-hyalinum acuminatum. Nux juvenilis trigona, in rostrum brevem attenuata. Styli basis subaequalis. Stigmata 3.

Yunnan (云南): Lijiang (丽江), Yulongshan (玉龙山), in declivitatibus orient., alt. 4300 m, in declivitatibus, J. F. Rock 11693 (Holotypus PE).

本种与截鳞嵩草 *K. cuneata* Kükenth. 接近, 惟后者叶较宽, 雌花无鳞片状退化花被片, 鳞片顶端截形或微凹, 先出叶边缘基部连合可与本种区别。

膨囊嵩草 新种 图 7

Kobresia inflata P. C. Li, sp. nov.

(Sect. *Hemicarex*)

Habitu species nova similis *C. nitanti* Clarke, quae foliis perangustis, spiculis partialibus lateralibus androgynis differt.

Rhizoma caespitosum. Culmus gracilis, 6—12 cm altus, lacvis basi vaginis pallide brunneis instructus. Folia basalia culmo breviora, plana, 2—3 mm lata, subtus et margine scabrida, apice triquetra curvata. Spicula propria unica, terminalis vel basi ramulis 3—4 e prophyllis utriculiformi nucem includente enatis, androgyna, elliptica, 2—2.5 cm longa, 7—8 mm lata, spiculae patiales paucae subdensae unisexuales, terminales 3—4 ♂, laterales 3—10 ♀. Bracteae squamiformes, apice longe aristatae. Squamae ♀ ovatae vel oblongo-ovatae, 7—7.2 mm longae, clare castaneo-brunneae, dorso virides trinerviae margine albo-hyalinae, acuminatae. Prophyllum squamam superans, oblongum, 8 mm longum subcoriaceum, inflatum, castaneo-brunneum nitidum, margine fere ad apicem usque connatum, ad carinam laeve, nervosum glabrum, basi subrotundatum, breviter stipitatum apice in rostrum longum, ore hyalinum oblique sectum sensim attenuatum. Nux inclusa obovato-oblonga 3 mm longa trigona subsessilis erostratum. Stylus conicus brevis. Stigmata 3.

Xizang (西藏): Zayü (察隅) Ridong (日东), mons Qimalazha shan (齐馬拉札山) ad Xizha (西札), alt. 4500 m, in pratis alpinis, 26 Sept. 1982, Exped. Qinghai-Xizang. (青藏队) 10103 (Holotypus); Yunnan (云南): Deqen (德钦), mons Baimashan (白马山), alt. 4600 m, in pratis alpinis, 13 Jul 1981, Exped. Qinghai-Xizang. 2392.

本种与 *K. nitans* Clarke 接近, 惟后者叶甚窄, 侧生支小穗雄雌顺序与本种有别。

长芒嵩草 新种 图 8

Kobresia longearistita P. C. Li, sp. nov.

(Sect. *Hemicarex*)

Affinis *K. setchwanensi*, Hand.-Mazz., quae spiculis densifloris, spiculis partialibus lateralibus omnino androgynis, squamis apice mucronatis vel breviter aristatis differt.

Rhizoma caespitosum. Culmus 20—30 cm altus, gracilis laevis, ad basin vaginis pallide brunneis obtectus. Folia culmo breviora, filiformia rigidula. Spicula cylindrica 2—3.5 cm longa, ca. 3 mm lata superne subdensi-basin versus laxiflora, spiculae partiales laterales femineae uniflorae vel androgynae 2—3-florae. Squamae ♀ ovato-lanceolatae vel lanceolatae 4—5 mm longae, chartaceae brunneae, dorso stramineo-virides trinervae, margine albo-hyalinae inferiores longissime scabro-aristatae. Prophyllum ellipticum, 4.5—4.8 mm longum, membranaceum stramineo-viride, supra medium brunneum margine basi connatum, enervium bicarinatum, minute scabrum demum glabrum, apice acuminatum. Nux elliptica, 2.8—3 mm longa, complano-trigona, breviter rostrata. Styli basis aequalis. Rhachilla secundaria linearis brevis adest.

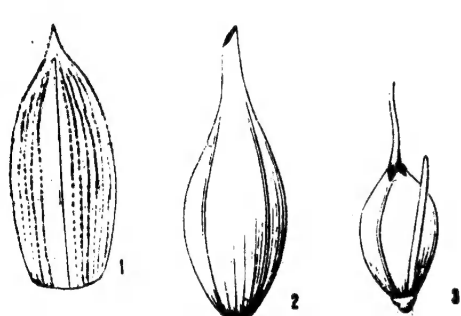


图7 膨囊嵩草 *Kobresia inflata* P. C. Li
1. 鳞片；2. 先出叶；3. 小坚果。(吴彰桦绘)

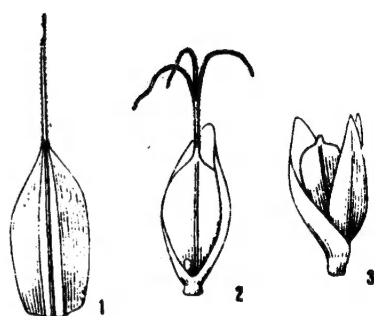


图8 长芒嵩草 *Kobresia longearistata* P. C. Li
1. 鳞片；2. 雌性支小穗；3. 雄穗顺序支小穗。(吴彰桦绘)

Sichuan (四川) : Xiangcheng (乡城), mons Wumingshan (无名山) Maxiunguo (马熊沟), alt. 3750 m, in pratis prope rivulos, 16 Aug. 1981, Exped. Qinghai-Xizang. (青藏队) 4800 (Holotypus PE).

本种与四川嵩草 *K. setchwanensis* Hand.-Mazz. 接近, 但后者小穗具密生的花, 侧生支小穗全部雄雌顺序, 鳞片顶端具突尖或短芒可与本种区别。

线穗嵩草 新变种

Kobresia cercostachya (Franch.) Clarke var. *capillacea* P. C. Li, var. nov.

A var. *cercostachya* differt foliis et culmis capilliformibus, spiculis capillaceis laxifloris.

Xizang (西藏) : Zayu (察隅). Ridong (日东), mons Laweir (拉威茹山), alt. 4200 m, ad rupes in fruticibus prati alpini, 9 Sept. 1982, Exped. Qinghai-Xizang. (青藏队) 10239 (Holotypus PE); Miling (米林) mons Duoxiongla (多雄拉山), alt. 4200 m in fruticibus prati alpini, 13 Jul. 1983, Li Bo-sheng (李勃生) 5526; Yunnan (云南) : Degen (德钦) mons Yuling (云岭), alt. 4150—4500 m, in fissuris rupinum in fruticibus prati alpini, Exped. Hengduanshan, Inst. Bot. (植物所横断山队) 3619.

本变种与原变种的区别在于叶与秆均为丝状，小穗线形，具疏生的花。

镰叶嵩草 新种 图9

Kobresia falcata Wang et Tang, sp.
nov. in herb.

(Sect. *Hemicarex*)

Affinis *K. esenbeckii* Kükenth., quae
spiculis diocis, cylindricis laxi-et multifloris
differt.

Rhizoma caespitosum. Culmus 10—15
cm altus, pergracilis, obsolete triqueter sca-
berulus, ad basin vaginis vetustis atro-fuscis
obtectus. Folia culmum subaequantia, plana
2—3.7 mm lata, interdum subfalcatum,
margine scaberulum. Spicula oblonga, 1.5
—2 mm longa, 3—4 mm lata, androgyna, densi-et pauciflora, spiculae par-
tiales 10—14, terminalis 3—4 ♂, laterales ♀. Squamae ♀ oblongae, 6—6.5 mm
longae, chartaceae brunneae, dorso 1—3-nerviae, apice rotundae longe aristatae,
aristis vulgo 1—1.5 mm eis squamarum inferiorum usque ad 9 mm longis scaberulis.
Prophyllum lineari-oblongum, 5—5.5 mm longum, brunneum membranaceum margine
fere liberum ad carinam laeve enervium. Nux prophylo brevior, lineari-oblonga,
trigona, 4.8—5.2 mm longa, brunneo-cineracea apice in rostrum longum subulatum
abrupte contracta. Styli basis subaequalis. Stigmata 3. Rhachilla secundaria linearis
complanata brevis adest.

West Sichuan (四川): sine loco accurato, 1934, Liou Zheng-shu (刘振出) 1336
(Holotypus PE).

本种与三脉苔草 *K. esenbeckii* Kükenth. 接近，惟后者小穗单性，圆柱形，具多
数疏生的花可与本种区别。

致谢 本文承王文采教授审阅，吴彰华先生绘图。

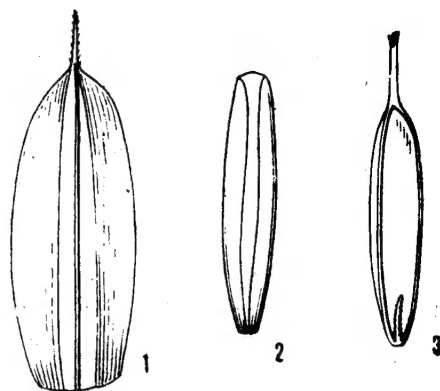


图9 镰叶嵩草 *Kobresia falcata* Wang et Tang
1. 鳞片; 2. 先出叶; 3. 小坚果。(吴彰桦绘)